

December 11, 2015

MEMORANDUM FOR: Distribution Email

FROM: Christine Caruso Magee
Configuration Manager, NCEP Central Operations

SUBJECT: Scheduled Operational Changes and Upgrades for
CPC, OPC, and WPC

Climate Prediction Center

The following accelerated items were implemented this past week:

RFC #522 – The SST consolidation graphic production routine was archiving to an incorrect location. This problem was fixed. Implemented on December 8 at 1600Z.

The following will be implemented the week of December 14, 2015:

RFC #523 – Modify the LRF Revision transmission to revise documentation, revise directory path statements to remove redundancies, and revise dating codes to bring this into consistency with other scripts in the LRF series. To be implemented on December 14 at 1200Z.

RFC #524 – Modify the LRF Product generation to change the dating scheme to account for exceptional cases more accurately, correct a syntax error in the GRIB2 file generation, and add more detailed documentation and process logging. To be implemented on December 14 at 1200Z.

RFC #530 – Implement a model-calibration-stats Python application that will create all of the statistics necessary to calibrate a model. This will be used to calibrate real-time models for CPC forecast tool production. To be implemented on December 14 at 1600Z.

The following RFCs are in progress:

None

The following NCO RFCs to be implemented the week of December 14, 2015 may affect CPC:

RFC #1579 – GPFS v4.1 (on Gyre) - Enhance the existing WCOSS - Gyre phase-1 and phase-2 storage solution by adding metadata-only GPFS NSD servers and changing the existing data-and-metadata NSD to data-only servers. Existing data will be "restriped" to separate the data and metadata. To be implemented beginning December 17 at 1200Z and should be completed by January 11. NCO/IDSB will send notification to users via the WCOSS-announce mailing list should planned work be impactful to users.

The following NCO RFCs are in progress and may affect CPC:

RFC #1435 – GPFS v4.1 (on Tide) - Enhance the existing WCOSS - Tide phase-1 and phase-2 storage solution by adding metadata-only GPFS NSD servers and changing the existing data-and-metadata NSD to data-only servers. Existing data will be "restriped" to separate the data and metadata. Implementation began on November 4 at 1200Z and should be completed by December 20. NCO/IDSB will send notification to users via the WCOSS-announce mailing list should planned work be impactful to users.

Ocean Prediction Center

The following accelerated items were implemented this past week:

RFC #521 – Added the new OPC Director's email address to the OPC shift log notifications. Implemented on December 7 at 1430Z.

The following will be implemented the week of December 14, 2015:

RFC #514 - Add 0.5 deg GEFS to the NAWIPS tables. Remove 1 deg GEFS from the ENSEMBLE list. Also repair the ETSS CONUS name and remove the non-working SREF 925mb entry in 'model_group.tbl' for the ENSEMBLE part of nmap2. Was to be implemented on December 8 at 1715Z; delayed due to CWD until December 14.

RFC #525 – Update OPC’s ‘patch_reminder.pl’ script. This script sends OAB a list of IDP systems and their new patch flag positions each week. The system uptime has been added to the output to better determine when the systems were last patched and rebooted. To be implemented on December 14 at 1230Z.

RFC #527 – Implement the December Satellite Proving Ground table changes for NAWIPS displays. This will be used by OPC, WPC, and NESDIS/SAB. To be implemented on December 14 at 1330Z.

RFC #528 – Discontinue Hudson-Baffin icing rate processing on IDP by deactivating its crontab entry. Remove the Hudson Bay option from the experimental icing rates web page. To be implemented on December 14 at 1400Z.

RFC #532 – Update the Cryosat outage warning threshold. With the new processing that was added via RFC 508, the outage warning email thresholds for Cryosat and AltiKa data were changed from 8 hours to 3 hours. Since then, Cryosat has had daily outages, ranging from 3 to 7 hours. AltiKa has not had any outages longer than 3 hours. The outage warning threshold is being updated to 7.5 hours for Cryosat. To be implemented on December 15 at 1500Z.

The following RFCs are in progress:

None

The following NCO RFCs to be implemented the week of December 14, 2015 may affect OPC:

RFC #1571 – ens_tracker v1.1.5 - During the off season (which began recently), the Tropical Cyclone Genesis jobs often do not produce trkprob files. In the current implementation, a failure occurs when attempting to copy those nonexistent files to the com directory. The offending script will be modified to continue processing when trkprob files are not generated. To be implemented on December 15 at 1330Z.

RFC #1576 – Additional memory will be installed on OPC’s ‘pacreg’ linux box to improve system performance. To be implemented on December 16 at 1500Z.

RFC #1579 – GPFS v4.1 (on Gyre) - Enhance the existing WCOSS - Gyre phase-1 and phase-2 storage solution by adding metadata-only GPFS NSD servers and changing the existing data-and-metadata NSD to data-only servers.

Existing data will be "restriped" to separate the data and metadata. To be implemented beginning December 17 at 1200Z and should be completed by January 11. NCO/IDSB will send notification to users via the WCOSS-announce mailing list should planned work be impactful to users.

The following NCO RFCs are in progress and may affect OPC:

RFC #1435 – GPFS v4.1 (on Tide) - Enhance the existing WCOSS - Tide phase-1 and phase-2 storage solution by adding metadata-only GPFS NSD servers and changing the existing data-and-metadata NSD to data-only servers. Existing data will be "restriped" to separate the data and metadata. Implementation began on November 4 at 1200Z and should be completed by December 20. NCO/IDSB will send notification to users via the WCOSS-announce mailing list should planned work be impactful to users.

RFC #1522 – MRMS v10.5.1 - Update MRMS to version 10.5.1, to begin production of the RIDGE2 (Radar Integrated Display with Geospatial Elements version 2) products operationally. Implementation began on November 30 at 1300Z and should be completed by December 28.

The following NCO RFCs, which may affect OPC, were approved with an implementation date TBD:

RFC #1357 – RTOFS global v1.1.0 – Major upgrade of the Global RTOFS model. See the TIN at: <http://www.nws.noaa.gov/os/notification/tin15-36global-rtofsaaa.htm> for details. This was advertised as having an October 6 implementation date but this implementation is being postponed due to a delay in the Navy's HYCOM model upgrade. Once the HYCOM upgrade is implemented, the Global RTOFS will be scheduled for implementation. Notification will be given in advance so users may prepare for any changes which may affect them. This upgrade of the Global RTOFS was approved by the NCEP Director.

Weather Prediction Center

The following accelerated items were implemented this past week:

None

The following will be implemented the week of December 14, 2015:

RFC #526 – Add a couple of scripts to operations to automatically tweet the headlines from the short range forecast discussion created by WPC twice daily. The scripts will be added to the Compute Farm cron. To be implemented on December 14 at 1300Z.

RFC #529 - Change script 'wwdwwc' to submit jobs to the Compute Farm to produce the 48-hour and 72-hour Probabilistic Winter Precipitation Forecast (PWPF) GRIB products for the preliminary issuance of the Winter Weather Desk forecast. This is in response to a request from Eastern Region for the complete PWPF package for both the prelim and final issuance. To be implemented on December 14 at 1500Z.

RFC #531 – Modify the PQPF script to use the PWPF ensemble. This will finalize unification of the winter weather and precipitation probabilistic forecasts. The precipitation probabilistic forecast script 'mk_op_pqpf' will be modified to 1) use precipitation from the winter weather ensemble when it's available; 2) use the GEFS and European ensembles when the winter weather ensemble isn't available; and 3) use the bias-corrected WPC precipitation forecast as a verification benchmark. To be implemented on December 15 at 1400Z.

RFC #533 – Move the script 'downscale_maxmin_ak.csh' to the Compute Farm. This script performs downscaling and bias correction of deterministic and ensemble models to 6 km grids over the Alaska Region. This is the first step in making the Alaska Max/Min Temperature Blender consistent with the CONUS Blender. To be implemented on December 15 at 1500Z.

The following RFCs are in progress:

RFC #517 - For the 2016 Winter Weather Experiment, test and run CF scripts to compute wind probabilities using NDFD winds and 10-meter winds from SREF/GEFS, create hourly snowfall verification using RAP13 and WPC ptype algorithm, post process experimental fields from 3km NAMX and HRAM3. Implementation to begin on December 7 at 1600Z and be completed by 2200Z on December 28.

The following NCO RFCs to be implemented the week of December 14, 2015 may affect WPC:

RFC #1569 – NCOSRV Dataflow v2.14.2 – The SPIDER software on NCOSRV is being modified to fix the resolution of the Blended Rainfall Rate imagery as requested by WPC. To be implemented on December 15 at 1300Z.

RFC #1579 – GPFS v4.1 (on Gyre) - Enhance the existing WCOSS - Gyre phase-1 and phase-2 storage solution by adding metadata-only GPFS NSD servers and changing the existing data-and-metadata NSD to data-only servers. Existing data will be "restriped" to separate the data and metadata. To be implemented beginning December 17 at 1200Z and should be completed by January 11. NCO/IDSB will send notification to users via the WCOSS-announce mailing list should planned work be impactful to users.

The following NCO RFCs are in progress and may affect WPC:

RFC #1435 – GPFS v4.1 (on Tide) - Enhance the existing WCOSS - Tide phase-1 and phase-2 storage solution by adding metadata-only GPFS NSD servers and changing the existing data-and-metadata NSD to data-only servers. Existing data will be "restriped" to separate the data and metadata. Implementation began on November 4 at 1200Z and should be completed by December 20. NCO/IDSB will send notification to users via the WCOSS-announce mailing list should planned work be impactful to users.

RFC #1522 – MRMS v10.5.1 - Update MRMS to version 10.5.1, to begin production of the RIDGE2 (Radar Integrated Display with Geospatial Elements version 2) products operationally. Implementation began on November 30 at 1300Z and should be completed by December 28.

Please note that security-related RFCs are never listed in the RFC memo.

---- OPERATIONAL ANNOUNCEMENTS ----

1. The CPC/OPC/WPC Configuration Management documents are available at <https://sites.google.com/a/noaa.gov/nws-ncep-nco-cm/>.

Please review these documents if you have questions prior to submitting changes for CPC/OPC/WPC configurable items.